

**Results:** 88/100 patients with hand trauma and “HAND” X-rays were found to have acute fractures. Only 47 presented to trauma clinic with sufficient imaging (AP/oblique/lateral hand X-ray) of which 44 were found to have acute bony injuries. For 53 patients, (44 of which had an acute injury), no lateral imaging of the hand was performed. All 100 patients had AP/oblique images. 20/100 patients were referred from our own A&E department, 60% of which had insufficient imaging. Only 50% (range 42–72% between four referring centres) of the other 80 patients had sufficient imaging.

**Conclusions:** The lateral film is imperative for correct diagnosis and management in hand trauma. However, the majority of patients seen in fracture clinic are referred with inadequate imaging. After initial consultation with an orthopaedic specialist, many of these patients are then required to attend radiology for a second time before a correct diagnosis is established. With potential additional costs of up to £510 based on the cost of the required additional plain film for each of the 53 patients in our small group, this has significant financial implications for the orthopaedic department. We recommend that a guideline be made available to all referring centres, incorporating guidance on minimum required investigations prior to referral in all cases of hand trauma.

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### The impact of MRI scans in acute wrist injuries

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**Aim:** The aim of this study (1) to find out the role and usefulness of MRI scans in acute wrist injuries, (2) to assess the prevalence and distribution of multiple occult injuries of the carpal bones and distal forearm bones. The patients who are being referred to trauma clinic as query scaphoid fractures are included in the study.

**Materials and methods:** One hundred and ten patients were included in the study. A retrospective analysis of all these patients for a period of 2 years were carried out. All patients who have been referred to trauma clinic as scaphoid fractures were included. All of them had an initial period of conservative treatment either with a scaphoid cast or a future splint for 2 weeks. The patients who had persisting symptoms in the nature of pain, tenderness were sent for MRI scans. These patients had no bony injuries in the plain X-rays (scaphoid views) There were 72 males and 38 females. The age group varied from 13 to 71 years (average 35.14 years). The right side was involved in 56 cases, 2 cases were bilateral. The dominant side was in 52 cases, in 16 patients the dominant side was not mentioned. MRI was performed with and without fat saturation sequences. The MR images were analysed for detection of occult trabecular contusions and cortical discontinuity in the carpus, the distal forearm, intercarpal ligaments and metacarpal bases.

**Results:** A total of 110 wrists were analysed. Fourteen (13%) had occult bone fractures. Among these 14, only 3 (2%) had scaphoid fractures diagnosed by MRI scans. The other carpal bones fractured were hook of hamate (4) and trapezium (2). Nine (8%) patients had fracture of distal radius, TFCC tear was noted in 5 (4%), carpal degeneration was seen in 8 (7%). The other findings were ganglion, 14 (13%) and bone bruising, 12 (11%). Three (2%) had Kienbock's disease.

**Conclusion:** The MRI scans is a useful tool in obtaining a definite diagnosis in acute wrist injuries. However in the diagnosis of occult scaphoid fracture after two weeks, the chance of finding a definite fracture in the scaphoid is only 2%. We conclude that in majority of patients with persisting symptoms after 2 weeks following a wrist trauma, the cause of symptoms will be pathology in other tissues

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### The use of antibiotics in hand injury

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**Introduction/aims:** Open hand injuries are common. There are various opinions in the literature about antibiotic usage of these injuries. This variation, especially when dealing with dirty injuries is reflected in the current literatures. This audit reviews our clinical experience, and current literature in the antibiotic management of this injury

**Methodology/results/discussion:** We reviewed 98 patients over 3 consecutive months in 2008 with open hand injuries. 27 patients had clean injuries and 71 had dirty injuries. Clean injuries were defined as “an injury less than 24 h to presentation, and wounds not involving bites, or crush, bone and joint or gross contamination.” Dirty injuries were injuries which fell outside this definition. All wounds were thoroughly debrided in theatre.

Out of 27 clean injuries, 19 patients (70%) received no post-surgical antibiotics and the rest had. Both developed no complications at wound check at 2 weeks.

Out of 71 dirty wounds, 57 patients (80%) received antibiotics post operatively. In this group, there was a variation in terms of type, length and dosage of antibiotics prescribed.

**Conclusion:** Clean wounds, with through surgical debridement should not be initiated with post-surgical antibiotics. For dirty wounds, uniformity of post surgical antibiotics is the goal, as this has implications on cost, whilst safe guarding high standard of post surgical care for patients. However, the complexity of these wounds makes this a difficult task.

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### The use of a suture room for the treatment of upper limb lacerations

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Upper limb lacerations are a common injury. Traditionally, these have been assessed and treated in the Emergency Department (ED). This has become increasingly rare. A number of different reasons have been postulated. These include the increasingly junior status of those that work within the ED and the 4 h target within the ED.

After referral to the orthopaedic department, these patients are often assessed by increasingly junior staff. Thus, when these patients are assessed by a sufficiently qualified practitioner, there exists no option but to take them to theatre for repair of their injury. The aim of our study was identify the number of patients requiring surgery for hand and wrist lacerations and identify if these patients could be managed without the need for theatre.

We collected data in a prospective fashion from 1/9/09 to 3/11/09 at a large district general hospital.

Over a 10-week period, 36 patients required surgery for their hand or wrist laceration. 27 were male and 9 were female. The average age was 34 years. The average length of procedure from was 21 min. 32% of patients were admitted overnight.

In two thirds of cases, the operating surgeon felt the procedure could have been performed in a suture room rather than in theatre. Among those patients who could have been operated on within a suture room, 21 would not have required an admission for any other reason.